

viduals predominate in scattered populations of *L. platyglossa* throughout its range, the occurrence of yellow anthers in this species is not reported in existing floristic treatments of *Layia*. Clausen (loc. cit.) recorded *L. platyglossa* with yellow anthers in much of its southern Californian distribution and in Baja California. I have observed collections of *L. platyglossa* with both uniform yellow rays and yellow anthers from Riverside County, outside of the San Jacinto Mountains, and San Diego County. Conversely, a small proportion of individuals in the *L. zieglerei* populations sampled had black anthers and yellow rays or black anthers and white-tipped rays (Bainbridge 91-3), as in typical *L. platyglossa*.

These counts of  $n=7$  from two populations referable to *Layia zieglerei*, in addition to a count by Peter H. Raven [ $n=7$ , Riverside Co., San Jacinto Mountains, Hemet Meadows, Raven 12971 (RSA)], corroborate morphological evidence that *L. zieglerei* is conspecific with *L. platyglossa*. Because the yellow-anthered and yellow-rayed condition in *L. platyglossa* does not mark a discrete sublineage, I hesitate to recognize the San Jacinto Mountains plants as a subspecies. These populations are noteworthy, however, as the highest known elevational occurrences of *L. platyglossa*.

*Madia stebbinsii* T. W. Nelson & J. P. Nelson,  $n=9$ , CA, Trinity Co., 7.5 km E of Wildwood-Mad River Road along U.S. Forest Service Road 28N10, Baldwin 611 (DAV).

This chromosome count for *Madia stebbinsii* provides further evidence that this species, *M. doris-nilesiae* T. W. Nelson & J. P. Nelson, *M. hallii* Keck, and *M. nutans* (E. Greene) Keck, all with  $n=9$ , belong to the same sublineage within *Madia* (cf. Nelson, T. W. and J. P. Nelson, A new *Madia* of sect. *Anisocarpus* [Compositae: Heliantheae] from Trinity County, California, Brittonia 37:394-396, 1985). These four species are among only eight in all of Madiinae with  $n=9$ , the others being *Hemizonia kelloggii* E. Greene, *H. pallida* Keck, *H. pungens* (Hook. & Arn.) Torrey & A. Gray [including *H. laevis* (Keck) Keck], and *Osmadenia tenella* Nutt. In *Madia*,  $n=9$  appears to have been derived from  $n=8$ , the modal diploid number, by ascending aneuploidy. The four  $n=9$  *Madia* species are North Coast Range endemics restricted to serpentine (*M. doris-nilesiae*, *M. hallii*, *M. stebbinsii*) or weathered volcanic (*M. nutans*) soils. Morphologically, they are distinguished from other annual *Madia* species by their yellow anthers and pappose disk florets.

I thank Susan Bainbridge and Scott Martens for critical field assistance; Donald Kyhos and Wayne Maddison for use of microscope facilities; and Christopher Campbell, John Mooring, and Robert Robichaux for helpful comments on the manuscript.

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(Received 21 Mar 1992; revision accepted 12 May 1992.)

## NOTEWORTHY COLLECTIONS

### ARIZONA

*BOEHMERIA CYLINDRICA* (L.) Swartz (URTICACEAE).—Gila Co., Tonto National Forest, Sierra Ancha Wilderness Area. Collected twice on 7 Aug 1991: (1) at Devil's Chasm, along stream just below road, 21.8 mi N on FS 203 (Cherry Creek Road) from junction with Hwy. 288, T6N, R15E, NW ¼ sect. 31, elev. ca. 1000 m, Imdorf & Landrum 37 (ASU, GH); and (2) in wet area along road at 34.4 mi N on FS 203 from junction with Hwy. 288, T7N, R14E, NE ¼ sect. 28, elev. ca. 1200 m, Imdorf & Landrum 74 (ASU).

*Significance.* Previously known in Arizona from only two collections, both made about 100 years ago: Gila Co., Catalpa (now covered by Roosevelt Lake), ca. 750 m, 6 Sep. 1891, *D. T. McDougal 746* (US), and Cochise Co., Fort Huachuca, July 1893, *J. E. Wilcox s.n.* (NY), as reported by one of the authors (DEB) in a manuscript in press on the Urticaceae of Arizona. Knowledge of this manuscript led the other authors to search for the species in an area ca. 18 mi NE of the original Catalpa locality. There has apparently been no previous published report of this species in Arizona. The Arizona plants are distantly disjunct from the nearest known populations in Utah (see below) and New Mexico, Chaves Co., Roswell, ca. 3800 ft., *F. S. & E. S. Earle 265* (MINN, NY, US; cited as *B. scabra* (Porter) Small in Martin & Hutchins, *A Flora of New Mexico*, vol. 1, 1980). The New Mexico location is about 1100 km ENE of the Fort Huachuca site and about 1300 km E of the Sierra Ancha. The Utah site is ca. 350 km N of Sierra Ancha. The main portion of the range of the species in the United States is almost entirely east of the 100th meridian.

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#### CALIFORNIA

*GAUDINIA FRAGILIS* (L.) P. Beauv. (GRAMINEAE).—Sonoma Co.: T10N R10W S3 SE ¼ of NW ¼, 0.2 km W of Hwy. 101, 2 km S of the Asti exist, elev. ca. 100 m, low grassy hills with *Quercus*, 20 May 1991, *J. Guggolz & B. Guggolz 1142* (CAS).

*Previous knowledge.* This distinctive genus of 4 species is native to southern Europe, the Middle East, northern Africa, the Azores, and the Canary Islands (Bot. J. Linn. Soc. 76:353–356, 1978). *Gaudinia fragilis* is the most widely distributed species in the genus (circum-Mediterranean) and is known as a frequent casual in NW and E Europe where it occasionally persists (Fl. Europaea 5:217, 1980).

*Significance.* This collection represents the first report of the establishment of both this genus and species in the Western Hemisphere. Plants were collected on an open grassy hilltop in thin, rocky soil. The locality is in a general region of open oak woodland but much of the nearby land has long been used for farming (currently viticulture) and/or livestock pasture. The origin of *G. fragilis* at this locality remains unknown; however, it is not unlikely that seeds were inadvertently introduced in conjunction with past or present agricultural pursuits associated with this portion of Sonoma County.

*Gaudinia* is classified in subfamily Pooideae, tribe Aveneae, subtribe Aveninae where it is aligned with the *Helictotrichon* Schult. group of genera, all of which have hairy ovaries. The genus is recognizable by its spicate inflorescence with a disarticulating rachis and a caryopsis with a very short stylopodium. The inflorescence of *Gaudinia* is unusual among Aveneae with the result that the genus does not “key” in existing American grass keys. Because there are no descriptions of this genus and species in North American manuals and because the taxon will not be included in the forthcoming revision of the California flora (D. Wilken personal communication), a description of *G. fragilis*, based on North American plants, is provided below.

Annual; culms to 3.5 dm tall, erect or ascending, usually clustered; leaves (sheaths and blades) villous, the blades flat, the ligule short, truncate; inflorescence a solitary terminal distichous spike to 15 cm long, the rachis disarticulating at prominent joints; spikelets sessile, 9–20 mm long (excluding awns), laterally flattened with flat side ± appressed to concave rachis; glumes unequal, the lower 3–5 mm long, the upper 7–11 mm long (the lower ca. ½ the length of the upper), both scabrous on nerves, awnless, the margins hyaline; florets 3–6; lemmas (3–)5–8 mm long, scabrous on midnerve, dorsally awned above the middle with a single twisted or geniculate scabrous awn to 15 mm long; anthers 2–4 mm long. Caryopsis not seen.

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*SEDUM OBLANCEOLATUM* Clausen (CRASSULACEAE).—Siskiyou Co., Klamath National Forest, ssw. slope of ridgeline 1.2 air km wnw. of summit of Copper Butte, or 2.8 air km due e. of Cook and Green Butte, Pacific Crest Trail above the headwaters of East Fork Seiad Creek, a tributary of the Klamath River, T47N R11W S9 se.¼ of ne.¼, Mt. Diablo meridian, ca. 380 genets, sunny xeric green phyllite-schist outcrops, associated with *Sedum obtusatum* ssp. *retusum*, *S. stenopetalum*, *Lewisia cotyledon* ssp. *cotyledon*, *Selaginella wallacei*, *Eriogonum nudum*, *Orobanche uniflora*, *Eriophyllum lanatum*, *Holodiscus discolor*, etc., ca. 1615–1735 m, 11 Jun 1991, Zika & Mumblo 11198 (OSC).

*Significance.* First collection from the Klamath River drainage for this species, previously believed to be endemic to a small portion of the upper Applegate River drainage in California and Oregon. A range extension of 2.8 km s. of the nearest known site in the Applegate basin. Clausen (*Sedum* of North America, 1975) and Denton (*Brittonia* 34:48–77, 1982) reported the taxon was restricted to igneous diorite, here it is on metamorphic rock. Unpublished field studies by the Rogue River National Forest have shown *S. oblancheolatum* also grows on Applegate metavolcanic and metasedimentary outcrops, as well as on ultramafic serpentinite and peridotite in the Applegate basin. Denton (*Taxon* 28:149–155, 1979) found sympatry in *Sedum* section *Gormanina* was extremely rare, here thousands of the tetraploid *Sedum obtusatum* ssp. *retusum* are found with the diploid *Sedum oblancheolatum*, in places within a few meters of each other on the same ledges on the ridgeline.

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#### WASHINGTON

*SAXIFRAGOPSIS FRAGARIOIDES* (Green) Small (SAXIFRAGACEAE).—Chelan Co., Wenatchee National Forest, ca. one mile west of Leavenworth on U.S. Route 2, T24N, R17E, S10. Growing in rock crevices of Castle Rock climbing area, elevation ca. 1700 feet, 3 June 1991, *Burnett & Arnot 346a, 346b* (WTU). Determination confirmed by Patrick Elvander.

*Significance.* First record for WA. Formerly known only from northern California and southwestern Oregon, a disjunction of ca. 400 miles. The popularity of Castle Rock as a climbing area creates the possibility that this population may have been introduced to Washington.

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